TWENTIETH REPORT

OF

THE BOARD

OF

WATER COMMISSIONERS,

TO THE

MAYOR AND COMMON COUNCIL

OF JERSEY CITY,

TO JULY 1, 1867.

JERSEY CITY:
PRINTED BY EDWARD JARDINE,
1867.

BOARD OF WATER COMMISSIONERS,

May 1st, 1867 to May 1st, 1868.

JAMES S. DAVENPORT, *President.*

JOB FALKINBURGH,

JACOB R. WORTENDYKE,

THOMAS EARLE, *President of the Common Council and ex-officio Water Commissionr.*

OFFICERS:

Superintendent and Engineer—JOHN F. WARD.

Registrar—S. J. TURNER.

Assistant Registrar—J. K. VAN ARSDALE.

Water Purveyor—ROBERT B. COAR.

Asst do. —J. N. FARQUHARSON.

Engineer at Pumping Works—WILLIAM KEARNEY.

First Assistant Engineer—GARRET NAFIE.

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TWENTIETH REPORT.

WATER COMMISSIONERS OFFICE,
JERSEY CITY, JULY, 1867.

To the Honorable the Mayor and Common Council of Jersey City:

GENTLEMEN—At the date of our last report the work of uniting the 36 inch main pipe with the syphon at the Hackensack river was progressing. About the first of August it was completed, and the water let in, the pressure of which, proving too great for the pipes, drew their joints apart. After a consultation of the Commissioners and Engineers, it was decided necessary to take up the syphon, and have another constructed of greater strength with flanged joints securely bolted together, which it was thought would be sufficiently strong to sustain the pressure of the water. The Engineer having been instructed to proceed without delay, to have the pipes cast, and the work completed, urged the work as fast as possible, and in October completed it, and let in the water to test the strength of the joints, which proved sufficient to sustain the pressure.

In consequence of one of the pipes being imperfect, soon after the letting in of the water, a break occurred, which made it necessary to shut off the water, take up the syphon, and have the damaged pipe replaced with a new one, a part of the expense of which was borne by the manufacturer of the pipe.

Subsequently, the pipe has broken several times, one of the breaks having been caused by the great quantity

of ice floating against the piers of the bridge, which twisted the syphon, and broke it in the middle. To obviate a similar accident from the ice, the Engineer ordered a pipe made with a flexible joint, which will be completed during the present month.

The bridges, and the pipes thereon, and the syphon, cause the Commissioners constant anxiety, as they are liable to accidents from vessels passing through the draws, from the accumulation of large quantities of ice above the bridges, from sparks from passing locomotives, from the near proximity to the storage of large quantities of petroleum at Penhorne City, and from the combustion of the same in its transit through the bridges to New York city. The danger from these causes, can only be avoided by either tunneling, or laying pipes on the bed of the river, either of which would be expensive, both having received the consideration of the Board.

But as the time is fast approaching, when a large extension of the works will become necessary, and necessitate a safe and uninterrupted passage across the river, the Board have decided to guard with vigilance the works at the river. and prevent if possible any accident from the causes already referred to.

ENGINES AND ENGINE HOUSES.

The engines are in perfect order, and are operating with entire satisfaction.

The alterations to the West Point engine, referred to in our last report, have been completed, and our expectations have been more than realized. We expect to alter the Jersey City engine in a similar manner, said alterations to remove the danger of accidents to the valves and valve chests which has been heretofore great, and this when completed will defer the necessity of a third engine for some time. The engine houses are in the same condition as when last reported,

STAND PIPE.

The alterations referred to in our last report were delayed by the severe cold weather of last winter, and the difficulty of the contractor to secure the services of competent persons to finish the work on the top of the pipe. They have succeeded however in completing it, and it now answers the desired purpose, enabling both engines to work at once in the same pipe without any difficulty, and relieving us from the necessity of building another stand pipe, which would cost at the present time some eighteen thousand dollars.

BUILDINGS AND GROUNDS.

The grounds belonging to the works, are in good condition. The title to the property for a new reservoir has been vested in the city, and the amount of the purchase money paid. Some parts of the fence of the Bergen Hill Reservoir need replacing with a new one, and this will receive in due time the attention of the Board.

The pipe yard and workshops in Provost Street were old, and very much dilapidated, and the distance from the office rendered it very inconvenient. The Board having a favorable opportunity to sell, concluded to do so, and sold them for $7,500. We then purchased two lots more conveniently located in Bay street, and caused new buildings to be erected thereon, with fences complete, at a cost within the amount realized from the sale of the Provost street property.

RESERVOIRS.

Both of the Reservoirs, with the walls, banks and gate houses are in good condition, and have not required any repairs during the past year. At present the supply of water is ample, it having reached the highest point since the works were built, and this with the work of but one engine. This is attributable to two causes, one of which

is the alteration to the West Point engine, which has very much increased the delivery of water, and the other, a great cause also, is the stringent rules adopted by the Board to prevent the unnecessary waste of water, which has in the past been very great, and still continues, but not to the extent of former years.

SEWERS.

During the past year, there have been built sewers in South Seventh and Essex streets, (those in Newark avenue, Warren, York, Gregory, and Henderson streets being not yet completed) and rebuilt, laterals in Steuben and Prospect streets. The sewers in York, Gregory, Henderson, Steuben and Prospect streets, have been built under an act of the Legislature, passed in 1865, which provides for the payment therefor by an annual tax of one dollar on each lot of ground of 2,500 square feet or less, within the limits of the city.

The Board have issued bonds for an amount sufficient to pay for these sewers, bearing seven per cent. interest, and have sold them at their par value. For statistics relating to sewers you are referred to the report of the Engineer.

PIPES, &C.

For the extent of pipes laid during the year, and statistics relating to the extension, and condition of the works, we respectfully refer you to the report of Mr. John F. Ward, Superintendent and Engineer.

FINANCES.

For statistics relating to this important department you are referred to the report of Mr. S. J. Turner, Registrar.

All of which is respectfully submitted.

JAMES S. DAVENPORT, Pres.
JOB FALKINBURGH,
JACOB R. WORTENDYKE,
THOMAS EARLE.

SUPERINTENDENT & ENGINEER'S REPORT.

JERSEY CITY, JULY 1ST., 1867.

To the Board of Water Commissioners:

GETLEMEN—The following report of the condition and operation of the works during the past year is respectfully submitted.

The engines have been in motion 6,598 hours, 42 minutes. The amount of anthracite coal used for raising steam was.....1.848 8-10 tons.
For other purposes..... 53 2-10 tons.
Slate..... 6 1-10 tons.

Total.....1,908 1-10 tons.

The pump of the West Point engine has been almost entirely renewed on an improved plan, and works satisfactorily at all stages of water. An arrangement has been made in the well room by which the hot, greasy water from the condenser is carried away in drain pipes, instead of being pumped into the reservoir, thereby obviating the trouble arising from hot vapor in the engine room, and almost entirely doing away with the usual complaints of the bad quality of the water during hot weather.

AVERAGE DAILY AND ANNUAL CONSUMPTION OF WATER FOR TEN YEARS.

Year ending,	Daily Average.	Annual Consumption.
July, 1858	188,666 c. f.	68,863,050 c. f.
July, 1859	230,684	84,199,813
July, 1860	267,992	97,817,062
July, 1861	288,872	105,438,394
July, 1862	308,445	112,582,478
July, 1863	340,344	124,225,867
July, 1864	406,127	148,236,333
July, 1865	478,385	174,610,667
July, 1866	540,307	197,212,222
July, 1867	573,276	209,246,015

Water was let into the 36 in. syphon in the latter part of July last, and the spigot joints not proving strong enough, flange pipes were substituted which stood (with the exception of one defective flange,) until broken by the pressure of the ice against the bridge during a severe storm in February.

These breaks though not totally depriving us of a supply of water, show the inherent weakness of syphons of such dimensions. The 24 inch syphon was somewhat shaken by a large barge which tore away a part of the turnpike bridge on its way up the river. If the collision had taken place on the up-river side the consequences to the pipes could not but have been very serious, and from the exposed situation, any efficient protection against such accidents would be very difficult.

The change in the 36 inch main pipe by which it was made to deliver the water into the Bergen Reservoir near the top of the bank, was completed in July, 1866, and has at three different times prevented a large if not total loss of water from the reservoir.

The reservoirs and distributing pipes are in good order as usual.

Respectfully submitted,

JOHN F. WARD,

Superintendent and Engineer.

Work done and supplies consumed by Engines during the year ending July 1st, 1867.

DATE.	TIME OF PUMPING.	STROKES.	CUBIC FEET PUMPED.	COAL USED.		ASHES, POUNDS	OIL GALLS.	TALLOW POUNDS.	WASTE POUNDS	HEMP POUNDS.
				PUMPING	FANKING					
1866.	H. M.									
July	538 20	232,934	15,606,377	313 821	19,100	59 077	20	119	25¼	9½
August	608 00	265,190	17,767,730	358,900	15,400	71,025	24	129½	26¾	10¼
September	556 25	216 176	16,616 380	327,800	14 409	66,696	20	119	13½	15¼
October	586 30	262 118	17 826 061	340,500	15,500	69 805	15	108	13¾	25½
November	537 35	254 175	17,283,900	342,100	18,600	69,200	20	121	28	49
December	597 50	291,505	19,822,340	370,480	16,810	68 703	20	75	22½	
1867.										
January	511 50	254,754	17,324 272	328,600	14.770	65,045	24	65½	26¾	
February	545 40	261,386	17,774 248	331 350	16 200	71,861	22	55	15¼	30
March	607 30	280,506	19,074,408	345,815	16,300	72,760	28	143½	44½	7½
April	551 07	263 689	17,930,852	325,500	20 000	61,920	13	157	32¼	11
May	483 35	241,179	16,400,172	295,250	20 960	49 441	29	100½	30½	31½
June	471 20	232,629	15,818,772	276,725	25 950	46,330	33½	87	31¼	15
Totals	6,598 42	3,036,268	209,246,015	3 927.119	244,220	771,866	297	1,260	319¾	195½

or
1,565,268,891
gals

3334 lbs. of coal more than
year ending July 1, 1865, and
104,046,665 gals. of water pump-
ed more than in said year

EXTENSION OF IRON PIPE

FROM JULY 1, 1866, TO JULY 1, 1867.

Size.	Length.	WHERE LAID.
Inch.	Feet.	
36	238	At Bergen Reservoir.
6	33	Coles street, corner of South 1st.
6	283	North 4th street between Prospect and Grove.
6	230	Prospect, between South 4th and 5th.
6	47	Cor. South 5th street and Prospect.
6	720	Prospect street between North 9th and North 12th.
6	4	Cor. Bay and Prospect streets.
6	24	North 4th between Grove and Prospect streets.
6	420	Mercer between Jersey avenue and Varick street.
6	186	Van Vorst between Sussex and Morris streets.
6	120	South 1st street West of Jersey avenue.
6	36	Warren street South of Morris Canal.
6	606	South 1st street between Jersey avenue and Monmouth street.
6	535	Wayne street between Putnam and Colgate.
4	99	Connecting Fire Hydrants.
4	344	North 12th between Grove and Prospect streets.
	3,955	

EXTENSION OF STOP COCKS,

FROM JULY 1, 1866, TO JULY 1, 1867,

Size.	Number.	WHERE LAID.
Inch.		
6	1	At Watch Factory, West End.
6	1	At corner of Prospect and North 12th streets.
6	1	At corner South 1st and Monmouth streets.
6	1	At corner Wayne and Gilbert streets.

EXTENSION OF FIRE HYDRANTS,

FROM JULY 1, 1866, TO JULY 1, 1867.

Number.	WHERE PLACED.
1	Corner of Coles and South 1st streets.
1	North 4th, between Prospect and Grove streets.
1	Mercer street between Jersey avenue and Varick streets.
1	Van Vorst street between Sussex and Morris streets.
1	South 1st between Jersey avenue and Coles streets.
1	Pipe Yard in Bay street.
1	Wayne street between Gilbert and Colgate streets.
7	

FIRE HYDRANTS.

In Jersey City	333
In Hoboken	53
In Hudson City	51
In Bergen	10
Total	447

Statement of Pipe Work connected with the Jersey City Water Works to July 1st, 1867,

PIPES.	36-inch.	26-inch.	24-inch.	20-inch	16-inch.	12-inch.	10-inch.	8-inch.	6-inch.	4-inch.	3-inch.	Total Feet.
Laid prior to July 1, 1866.....	33,145	3,500	3,783	42,461	2,861	19,513	885	515	99,718	13,039	4,613	224,034
Laid prior to July 1, 1867.....	238	.....	.....	.....	.....	.....	.....	.....	3,512	443	... ...	4,193
Totals in Jersey City and vicinity	33,383	3,560	3,783	42,461	2,861	19,513	885	515	103,230	13,482	4,613	228,227
Laid in Hoboken.....	.....	.....	.....	.....	2,020	1,900	.....	.....	29,073	1,408	143	34,544
Laid in Hudson City.....	.....	.....	.....	.....	.....	4,150	.....	.....	14,395	1,100	.....	19,645
Laid in Bergen.....	.....	.....	.....	.....	.....	.....	.....	.....	7,421	6,718	700	14,839
Total.....	33,383	3,500	3,783	42,461	4,881	25,563	885	515	154,119	22,708	5,456	297,255

Total length of Pipe connected with the Jersey City Water Works—56 miles, 1575 feet.

STOP-COCKS.

LOCATION.	36-inch.	26-inch.	24-inch.	20-inch.	16-inch.	12-inch.	6-inch.	4-inch.	3-inch.	Totals.
In Jersey City and on Mains.....	10	2	3	14	4	40	178	19	35	305
In Hoboken.....	.....	.....	.....	.....	1	1	44	4	.....	50
In Hudson City.....	.....	.....	.....	.....	.....	2	27	3	.....	32
In Bergen.....	.....	.....	.....	.....	.....		3	.....	.....	3
Total,.....	10	2	3	14	5	43	252	26	35	390

WATER METERS.

LOCATION.	3-inch.	2-inch.	1-inch.	¾ inch.	Total.
In Jersey City and vicinity	21	34	39	94	188
In Hoboken	6	2	4	23	35
In Hudson City		1	5	5	11
Total	27	37	48	122	234

Receipts from consumers supplied by meter measurement from July 1st, 1860, (the date of the general application of meters to ferries, railroads, manufacturing establishments, &c.

For the year ending July 1st, 1861	$10,616 27
For the year ending July 1st, 1862	14,183 87
For the year ending July 1st, 1863	18,804 84
For the year ending July 1st, 1864	26,732 36
For the year ending July 1st, 1865	42,745 48
For the year ending July 1st, 1866	51,482 77
For the year ending July 1st, 1867	55,307 97

SEWERAGE REPORT.

WATER COMMISSIONERS OFFICE,
JERSEY CITY, JUNE, 30, 1867.

To John F. Ward, Supt. and Engineer:

SIR—Sewers have been built in the following streets, viz.:—In Essex street from Hudson street to the Hudson river, and in South Seventh street from Newark avenue to a point about one hundred feet west of Brunswick street.

A Receiving Basin and Culvert has been placed on the south east corner of Hudson and Grand streets.

The cost of these improvements is shown in annexed tabular statement:

Tabular Statement of the length, cost, &c., of Main and Lateral Sewers, Basins and Culverts, built in Jersey City, under the General Sewerage Plan, for the year ending June 30, 1867.

SEWER.	Lineal feet of Main Sewer.	Size in feet.	Price per foot.	Amount.	Receiving Basins and Culverts.	Price.	Amount.	Incidental expenses.	Amount deducted from Contractors for overtime.	Total Cost of Sewer.	Assessment per ot 2500 square feet.	BUILDERS.
Essex Street fm Hudson Street to the River.	303 on Piles.	3	$15 87	$4,808 61	2	$280	$560	$458 76	$131 25	$5,696 12	$406 86	Keeney & Halliday.
South 7th St fromNewark Ave., to 100 feet west of Brunswick Street.	612 ——— 166 ———	3x26 3x2	$8 00 7 26	$4,896 00 1,205 16	6	$166	$996	$457 84	.....	$7,555 00	$270 80	J. H. Koeney.
Reeeiving Basin and Culvert, Hudson St.	.....	.....	.....	.....	1	$159	.....	$25 70	.....	$184 70	$23 09	Wm. Coleman.
	1081 ft			$10,909 77	9		$1556	$942 30	$131 25	$13,435 82	$700 75	

The reconstruction of the old sewers in York, Gregory and Henderson streets has been in progress during the year. The main sewers have been completed in York street as far as Henderson street, and in Gregory street to Van Vorst street. At the date of this report the whole work is within a few weeks of its completion.

The revision of the present laws, providing for the building of sewers is suggested, as many of the enactments upon this subject are conflicting, leading to embarrassment and delays in collecting the expenses incurred for their construction.

Respectfully submitted,

R. C. BACOT,

Engineer Sewerage Dept.

REGISTRAR'S REPORT.

To the Board of Water Commissioners:

GENTLEMEN,—Herewith, I beg to present my annual report for the year ending July 1st, 1867, which I respectfully submit for your consideration.

Total amount of revenue received for the year, from July 1st, 1866, to July 1st, 1867, as per Schedule "A," is $150,193 08, showing an increase over the preceeding year of $8,283 56.

Schedule "B" presents the total amount of expenditures, embracing interest on bonds, management and repairs of works from July 1st, 1866, to July 1st, 1867, $143,252 80.

The total amount expended for extension of the Water Works from July 1st, 1866, to July 1st, 1867, as per Schedule "C," is $67,766 65.

Schedule "D" shows amount expended for the extension of the works for each year from July 1st, 1857 to July 1st, 1867, and the amount of bonds sold on account of said extension.

Total number of Jersey City Water Loan Bonds issued for construction and extension of the works from their commencement to July 1st, 1867, is 1,373 bonds of $1,000 each, $1,373,000; total number of bonds redeemed by sinking fund up to July 1st, 1867, is 36 bonds of $1,000 each, $36,000, making total number of bonds unredeemed July 1st, 1867, as per Schedule "E" $1,337,000.

The balance in sinking or redemption fund this date, July 1st, 1867, as per Schedule "F," is $3,625 61.

The amounts paid for construction, &c., of the various sewers, culverts and Basins from their commencement to July 1st, 1867, and the interest penalty received from arrears on same; also amount received for tapping sewers, and the surface tax levied per acts of the Legislature in 1864 and 1865, will be found in detail in Schedule "G."

For amounts received and paid out on account of reconstructing old sewers, and total amount of Sewerage Bonds sold to July 1st, 1867, see Schedule "H."

Total amount expended for the extension of the Water Works to July 1st, 1867, $698,177 14 as per Schedule "I."

Total amount of revenue received from the works, from the introduction of the Passaic Water into the City, September 1st, 1854 to July 1st, 1867, is per Schedule "J" $1,085,137 48.

S. J. TURNER, *Registrar.*

WATER COMMISSIONERS OFFICE,

JERSEY CITY, JULY, 1867.

SCHEDULE A.

Statement of all moneys received as revenue from the Water Works from July 1st, 1866, to July 1st, 1867.

Arrears water rents, 1856 and 1857	$2 87	
Arrears water rents, 1858 and 1859	2 58	
Arrears water rents, 1859 and 1860	54 81	
Arrears water rents, 1860 and 1861	58 90	
Arrears water rents, 1862 and 1863	13 40	
Arrears water rents, 1863 and 1864	605 45	
Arrears water rents, 1864 and 1865	767 90	
Arrears water rents, 1865 and 1866	2,322 40	
Arrears water rents 1866 and 1867	13,869 78	
Water rents 1867 and 1868	33,659 29	
		$51,357 38
Penalties water rents, 1862 and 1863	28	
Penalties water rents, 1863 and 1864	28	
Penalties water rents, 1864 and 1865	87 80	
Penalties water rents, 1865 and 1866	348 79	
Penalties water rents, 1866 and 1867	855 78	
		$1,292 93
Advertising arrears water rents 1864 and 1865		24 20
Interest penalties water rents, 1856 and 1857	5 32	
Interest penalties water rents, 1858 and 1859	4 28	
Interest penalties water rents, 1859 and 1860	62 92	
Interest penalties water rents, 1860 and 1861	56 46	
Interest penalties water rents, 1861 and 1862	2 16	
Interest penalties water rents, 1862 and 1863	6 80	
Interest penalties water rents, 1863 and 1864	198 48	
Interest penalties water rents, 1864 and 1865	197 20	
Interest penalties water rents, 1865 and 1866	281 13	
Interest penalties water rents, 1866 and 1867	95 11	
		$909 86
Water rents from Hudson City	6,331 81	
Measured water to Hudson City	413 13	
		$6,744 94
Water rents from Hoboken City	24,426 66	
Measured water to Hoboken City	8,446 77	
		$32,873 43
Receipts from street sprinkling	175 00	
Measured water to railroads, ferries, &c	15,870 96	
Receipts from shipping	780 00	
Receipts from Cunard steamers	2,625 00	
Measured water to Steamboats	6,596 89	
Measured water to factories, foundries, &c	21,355 22	
Receipts from service pipe, (connections, &c.)	855 47	
		$48,258 54
Receipts from sale of old iron		1,147 80
Receipts from sale of pipe yard in Provost st., &c		7,584 00
		$150,193 08

SCHEDULE B.

Statement of moneys paid out from July 1st, 1866, to July 1st, 1867, for the following purposes, viz.: Interest on bonds or scrip, expenses for maintaining the works, and for raising and distributing the water, for salaries, wages and incidental expenses.

For interest coupons		$80,223 00
MANAGEMENT AND REPAIRS.		
Repairs and additions to pumping engines	$8,470 68	
Repairs and management stop cocks and hydrants	512 00	
Repairs and improvement to stand pipe	54 14	
Repairs and improvement at engine house	371 97	
Pipe repairs—Main and service	2,205 18	
Pipe yard in Provost street (for tools, &c.)	27 10	
Purchase, &c, pipe yard in Bay street	5,708 15	
Oil account, &c	763 61	
Horse and wagon account	750 99	
Repairs and additions to water meters	101 23	
Repairs and improvements to Hackensack river	14 40	
Repairs and improvements to Passaic river	659 84	
Repairs and improvements to Belleville reservoir	4 50	
Repairs and improvements to Bergen hill reservoir	201 42	
Fuel account	13,594 51	
Interest account—amount paid for temporary loans	4,397 53	
Incidental expense account	287 43	
Taxes and insurance	2,555 38	
Salaries—Commissioners, Superintendent and Engineer, Registrar and Registrar's assistant, Printer, Purveyor and Purveyor's assistant	13,369 16	
Engineer and Firemens wages	7,380 50	
Officee xpenses—Stationery, books, stamps, &c	1,119 68	
Legal expenses—Including salary of attorney	480 49	
		$63,029 80
		$143,252 80

RECAPITULATION.

Total receipts from July 1st, 1866 to July 1st, 1867, per Schedule "A"	$150,193 08	
Total expenditures from July 1st, 1866 to July 1st, 1867, per Schedule "B"	143,252 80	
Excess of receipts over expenditures		6,940 28
Deficiency up to July 1st, 1866, per last report	15,082 68	
Excess of receipts over expenditures for year ending July 1st, 1867	6,940 28	
		$8,142 40

SCHEDULE C.

Amounts expended for extension of the Water Works from July 1st 1866, *to July 1st*, 1867.

Extension iron pipe	$11,670 26	
Extension pipe laying	5,378 97	
Extension stop cocks and hydrants	729 94	
Extension land account	163 64	
Extension water meters	1,728 84	
New distributing reservoir at Hudson City	48 095 00	
		$67,766 65
Amount expended for the extension of the works from July 1st, 1866, to July 1st, 1867	$67,766 65	
Amount of bonds sold on account of extension from July 1st, 1866, to July 1st, 1867	48,000 00	
		19,766 65
Expenditure over issue of bonds from July 1st, 1866, to July 1st, 1867	19,766 65	
Expenditure over issue of bonds per last report	19,032 99	
Total amount of expenditure over issue of bonds for extension		38,799 64

SCHEDULE D.

Statement showing amount expended for the extension of the works for each year from July 1st, 1857, to July 1st, 1867, also amount of bonds sold on account of said extension.

From July 1st, 1857, to July 1st, 1858, for extension,	$6,937 17	
From July 1st, 1858, to July 1st, 1859, for extension,	12,515 35	
From July 1st, 1859, to July 1st, 1860, for extension,	10,548 02	
From July 1st, 1860 to July 1st 1861, for extension,	22 329 75	
From July 1st, 1861, to July 1st, 1862, for extension,	59,009 84	
From July 1st, 1862, to July 1st, 1863, for extension,	210,183 23	
From July 1st, 1863, to July 1st, 1864, for extension,	132,357 99	
From July 1st, 1 64, to July 1st, 1865, for extension,	103,337 15	
From July 1st, 1865, to July 1st, 1866, for extension,	73,191 99	
From July 1st, 1866, to July 1st, 1867, for extension,	67,766 65	
		$698 177 14
From July 1st, 1857, to July 1st, '61, (4 yr's) b'ds sold (10,)	10,000 00	
From July 1st, 1861, to July 1st, 1862, bonds sold, (76,)	76,000 00	
From July 1st, 1862, to July 1st, 1863, bonds sold, (246,)	246,000 00	
From July 1st, 1863, to July 1st, 1864, bonds sold, (168,)	168,000 00	
From July 1st, 1864, to July 1st, 1865, bonds sold, (100,)	100,000 00	
Premiums on sale of bonds to July 1st, 1865	11,377 50	
From July 1st, 1865, to July 1st, 1867, bonds sold, (48,)	48,000 00	
		$659,377 50
Due revenue to be made up by sale of bonds		$38,799 64

SHCEDULE E.

Statement of bonds authorized by acts of the Legislature, to be issued by the Water Commissioners of Jersey City; also showing the total amount of bonds sold and available July 1st, 1867.

BONDS AUTHORIZED TO BE SOLD.

Act of March 25th, 1852	$600,000 00	
Act of March 25th, 1852, (for interest)	102 000 00	
Acts of 1854, and February 27th, 1861	573,000 00	
Act of March 6th, 1863	200,000 00	
Act of March 14th, 1864	200,000 00	
		$1,475,000 00

BONDS SOLD AND AVAILABLE JULY 1, 1867.

Total number of bonds sold up to July 1st, 1867	$1,373,000 00	
Total number authorized, but not issued July 1st, 1867	102,000 00	
		$1,475,000 00

BOND ACCOUNT JULY 1, 1867.

Total number of bonds sold to July 1st, 1867. 1373 of each of $1000 each	1,373,000 00	
Bonds redeemed by the sinking fund to July 1, 1867, 36 of $1000 each	36,000 00	
		$1,337,000 00

SCHEDULE F.

Sinking or redemption Fund, Statement showing transactions during the year, and position of the account, July 1st, 1867.

Balance in sinking fund, July 1st, 1866..... ...	$3.445 61	
July 1st, 1867, received amount interest accrued on two bonds from January 1st, to July 1st, 1867.....	180 00	
		$3,625 61

POSITION OF SINKING FUND BALANCE.

On deposit in First National Bank of Jersey City, to the credit of the fund...	1,625 61	
Two Jersey City water loan bonds issue, (payable 1891) of $1000 each, Nos. 996 and 997....	2,000 00	
Balance in sinking fund, July 1st, 1867.....		3,625 61

SCHEDULE G.

Statement, showing the total amounts paid for construction of the various Sewers Culverts, and Basins constructed by the Board; also amounts received on Assessments for year 1867, on account of repairs, &c., to Sewers per Acts of 1864 and 1865; also amounts received as Principal and Interest, from the commencement of same to July 1st, 1867.

	Dr. Principal.	Cr. Principal.	Dr. Interest.	Cr. Interest.
Sewer in Essex street and laterals	12,527 09	$12,318 42		$152 30
Sewer in South Third street and laterals	20,698 96	20,846 34		1,092 98
Sewer in Wayne street, Newark and Railroad avenues and laterals	47,685 33	49,776 58		8,466 45
Sewer in Grand street and laterals	13,781 60	13,786 49		3,146 36
Sewer in South Fifth Street and laterals	22,218 30	22,268 79		2,208 01
Sewer in York and Grove streets and laterals	3,205 52	3,382 26		145 93
Sewer in South Seventh street and laterals	16,827 70	16,666 75		916 31
Sewer in South First street from east side Grove to Hudson River	5,412 16	5,408 52	290 69	134 34
Sewer in South First street from east side Grove to Jersey avenue	5,343 95	5,339 23	298 81	126 03
Sewer in Greene street	1,663 36	1,700 39	56 63	67 24
Sewer in Pavonia avenue from Erie street to the Hudson River	36,758 89	36,458 66	1,495 00	113 24
Sewer in Bay street from Erie street to the Hudson River	41,910 31	40,507 86	3,154 20	2,167 66
Sewer in So. 7th from Newark avenue to 100 feet west of Brunswick street	7,555 37	5,034 07	50 51	36 42
Sewer in Essex street from Hudson street to Hudson River	5,712 81	2,030 74		
Sewer in Newark avenue and Warren street	3,219 38			
Culvert and basin corner Grove and Montgomery streets	112 25	108 31		12 95
Culvert and basin corner Morris and Greene streets	228 58	243 70		4 82
Culvert and basin corner Grand and Greene streets	101 86	104 26		4 41
Culvert and basin corner York and Greene street	210 52	218 11		19 30
Culvert and basin corner Newark avenue and South 6th street	150 99	152 51		10 87
Culvert and basin corner York and Warren streets	115 18	130 18		7 14
Culvert and basin north side Steuben street, between Warren and Prospect sts.	136 55	138 79		9 37
Culvert and basin south side Steuben street, between Prospect and Warren sts.	131 50	134 49		8 54

SCHEDULE G.—(Continued.)

	Dr. Principal.	Cr. Principal.	Dr. Interest.	Cr. Interest.
Culvert and basin south east corner York and Van Vorst streets	154 56	158 00	4 71	2 59
Culvert and basin north west corner Canal and Grove streets	222 71	160 03		9 65
Culvert and basin north east corner Prospect and South Eighth street	242 50	249 96	16 86	17 08
Culvert and basin south west corner of Montgomery and Greene streets	157 32	174 97	34 52	3 94
Culvert and basin south side Railroad avenue, between Prospect and Warren sts.	226 55	239 81	17 54	5 72
Culvert and basin south east corner Grand and Hudson streets	166 00	69 15		
Sewerage account for tappings, &c	5,930 08	4,459 96		
Sewerage tax account for year 1864	3 05	2,102 06		155 58
Sewerage tax account for year 1865	83	2,042 61		53 27
Sewerage tax account for year 1866	83	1,974 60		20 52
Sewerage tax account for year 1867		1,363 60		
Reconstruction of old sewers for year 1866	4 15	9,826 00		95 53
Reconstruction of old sewers for year 1867		7,618 60		
Reconstruction of old sewer in York, Henderson and Gregory streets	50,124 72			
Reconstruction of lateral sewers in Steuben and Prospect streets	4,454 38			
Repairs to sewers in South Third street	25 66			
Repairs to sewers in Wayne street, Newark and Railroad avenues	212 84			
Repairs and cleaning sewer in Essex street	90 91			
Repairs to sewer in Grand street	119 55			
Repairs and cleaning sewer in York street	762 86			
Repairs and cleaning sewer in Gregory street	26 94			
Repairs and cleaning sewer in Grove street	107 05			
Repairs and cleaning sewer in Van Vorst street	5 38			
Repairs and cleaning sewer in Montgomery street	37 50			
Repairs and cleaning sewer in South Fifth street	2 25			
Repairs and cleaning culverts and basins	1,239 26			
Sewerage bond account, amount received from sale of 65 J. City sewerage bonds		65,000 00		
Totals	$310,056 04	$332,224 20	$5,419 47	$19,214 65

RECAPITULATION OF SCHEDULE G.

		Dr. Balance, Cr.	
Amount paid for construction, &c.....	$246,877 80		
Amount received on assessments.....	237,837 87		
		$9 049 43	
Amount paid out on sewerage account.....	5,930 08		
Amount received on same.....	4,459 96		
		1,470 12	
Amount rec'd on sewerage tax account, 1864	2,102 06		
Amount paid out on same.....	3 65		
			$2,099 01
Amount rec'd on sewerage tax account, 1865	2,042 61		
Amount paid out on same.....	83		
			2,041 78
Amount rec'd on sewerage tax account, 1866	1.974 60		
Amount paid out on same.....	83		
			1 973 77
Amount rec'd on sewerage tax account, 1867			1,363 60
Amount rec'd on reconstruction account, '66	9,826 00		
Amount paid out on same.....	4 15		
			9,821 85
Amount rec'd on reconstruction account, 1867.....			7,618 00
Amount paid out for reconstrucsion old sewers to July 1st, 1867.....		54,579 10	
Amount of interest received.....	19,214 65		
Amount of interest paid.....	5,419 47		
			13,795 18
Amount paid out for repairs and cleansing of sewers from July 1st, 1865 to July 1st, 1867,		2,660 20	
Amount received from sale of 65 sewerage loan bonds to July 1st, 1867.....			65,000 00

SCHEDULE H.

Statement showing the amount received and paid out on account of reconstructing old Sewers, and total amount of sewerage bonds sold to July 1st, 1867.

Amount expended for reconstruction of old sewers to July 1st, 1867	$54,579 10	
Amount received on account reconstruction up to July 1st, 1867	17,535 38	
		$37,043 72
Total number of bonds sold to July 1st, 1867, (65,) Nos. 1 to 65, $1000 each	65,000 00	
Amount of expenditure over receipts	37,043 72	
Amount of bonds issued and sold over expenditure		$27,956 28

POSITION OF RECONSTRUCTION ACCOUNT BALANCE, JULY 1, 1867.

Balance in First National Bank	$22,752 35	
Amount interest coupon account	3,590 65	
Cash on hand	1,613 28	
		27,956 28

SCHEDULE I.

Amounts expended for the extension of the Water Works from July 1st, 1857, to July 1st, 1867, represented by bonds.

From July 1st, 1857, to July 1st, 1858.

For extension of iron pipe	$364 78	
For extension of cement pipe	5,334 56	
For extension of pipe laying	241 75	
For extension of stop-cocks and hydrants	483 04	
For water meter account	13 04	
		$6,937 17

From July 1st, 1858, to July 1st, 1859.

For extension of iron pipe	$4,111 29	
For extension of cement pipe	2,152 92	
For extension of pipe laying	1,435 23	
For extension of stop-cocks and hydrants	570 44	
For stand pipe at Belleville	4,076 25	
For water meter account	169 22	
		$12,515 35

From July 1st, 1859, to July 1st, 1860.

For stand pipe at Belleville	$1,707 70	
For extension of iron pipe	2,500 43	
For extension of cement pipe	1,349 93	
For extension of pipe laying	1,249 82	
For extension of stop-cocks and hydrants	431 17	
For water meter account	308 97	
		$10,548 02

From July 1, 1860, to July 1st, 1861.

For extension of iron pipe	$2,006 06	
For extension of cement pipe	1,097 80	
For extension of pipe laying	368 53	
For extension of stop cocks and hydrants	159 05	
For new pumping engine	18,455 86	
For water meter account	242 45	
		$22,329 75

From July 1st, 1861, to July 1st, 1862.

For extension of iron pipe		$39 398 64	
For extension of cement pipe		2,342 49	
For extension of pipe laying		843 21	
For extension of stop-cocks and hydrants		1,314 09	
For water meters		4,759 14	
For new pumping engine	$9,740 98		
Less amount retained for one year from completion	5,000 00		
		4,740 98	
Pipe yard in Provost street, (purchase, &c.)		4,389 93	
Coal houses at engine house, Belleville		722 50	
Extension land account		488 00	
Main pipe across the bottom of the Hackensack river		10 86	
			$59,009 84

From July 1st, 1862, to July 1st, 1863.

Extension iron pipe	$124,456 17	
Extension cement pipe	17,983 82	
Extension pipe laying	56,870 07	
Extension stop cocks and hydrants	3,734 20	
Extension water meters	820 37	
Main pipe under Hackensack river	191 11	
Coal houses at engine house, Belleville	2,308 81	
Extension building at engine house, Belleville	2,450 00	
Wharf at Hackensack river	1,368 68	
		$210,183 23

From July 1st, 1863, to July 1st, 1864

Extension iron pipe	$83,412 61	
Extension cement pipe	639 31	
Extension pipe laying	29,976 17	
Extension stop-cocks and hydrants	3,822 31	
Extension water meters	4,187 20	
Main pipe under Hackensack river	1 731 05	
Coal houses at engine house Belleville	529 67	
Wharf at Hackensack river	115 00	
Extension land account	4,135 98	
Extension buildings at Belleville	3,708 69	
New distributing reservoir, Hudson City	100 00	
		$132,357 99
Total		$453,881 35

From July 1st, 1864, to July 1st, 1865.

Extension iron pipe	$28 842 18	
Extension cement pipe	3,926 70	
Extension pipe laying	11,628 34	
Extension stop-cocks and hydrants	3,978 29	
Extension water meters	1,604 39	
New pipe bridge at Hackensack river	44,048 47	
Coal houses at Belleville	6 32	
Extension land account	5,103 18	
Extension buildings at Belleville	832 84	
New distributing reservoir, Hudson City	366 44	
Extension to Belleville reservoir	3,000 00	
		$103,337 15
		$557,218 50

From July 1st, 1865, to July 1st, 1866.

Extension iron pipe	$7,820 34	
New distributing reservoir at Hudson City	25,138 26	
Extension pipe laying	7,125 46	
Extension cement pipe	176 10	
Extension stop-cocks and hydrants	1,270 85	
Syphon account, 36 inch pipe	15,975 67	
Extension land account	119 37	
New pipe bridge at Hackensack river	14,941 79	
Extension water meters	614 15	
		$73,191 99
		$630,410 49

From July 1st, 1866, to July 1st, 1867.

Extension iron pipe	$11,670 26	
Extension pipe laying	5 378 97	
Extension stop cocks hydrants	729 94	
Extension land account	163 64	
Extension water meters	1,728 84	
New distributing reservoir at Hudson City	48,095 60	
		$67,766 65
		$698,177 14

SHCEDULE J.

The following table exhibits the yearly revenue received from the sale of Passaic Water since its introduction into the city, September 1st, 1854.

From September 1, 1854, to May 1, 1855, (two-thirds of a year	$13,757 88
From May 1, 1855, to May 1, 1856	28,777 54
From May 1, 1856, to July 1, 1857, (one year and two months)	58,961 95
From July 1, 1857, to July 1, 1858	55,607 37
From July 1, 1858, to July 1, 1859	71,700 19
From July 1, 1859, to July 1, 1860	76,538 59
From July 1, 1860, to July 1, 1861	69,751 00
From July 1, 1861, to July 1, 1862	78,700 25
From July 1, 1862, to July 1, 1863	99,923 99
From July 1, 1863, to July 1, 1864	109,808 79
From July 1, 1864, to July 1, 1865	129,507 33
From July 1, 1865, to July 1, 1866	141,909 52
From July 1, 1866, to July 1, 1867	150,193 08
	$1,085,137 48